

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

Please cancel claims 3 and 13 without prejudice. Please add new claims 18-22.

1. (CURRENTLY AMENDED) A circuit comprising:

a buffer for storing a plurality of data packets; and

a test circuit configured to (i) monitor a number of said plurality of data packets in said buffer, (ii) ~~permit~~ receive an additional data packet to said plurality of data packets, (iii) store said additional data packet into said buffer responsive to said number being less than a first threshold, ~~and (iii)~~ (iv) discard said additional data packet in accordance with a probabilistic test responsive to said number being greater than said first threshold and (v) present an identification signal to a sender of said additional data packet identifying said additional data packet as discarded.

2. (CURRENTLY AMENDED) The circuit according to claim 1, wherein said test circuit is further configured to discard said additional data packet without storing said additional data packets in said buffer in response to said number being at least as great as a second threshold.

3. (CANCELED)

4. (CURRENTLY AMENDED) The circuit according to claim 1, wherein said test circuit is further configured to present a rate signal to said sender in a ~~first~~ slow rate condition in response to said number being greater than said first threshold.

5. (CURRENTLY AMENDED) The circuit according to claim 4, wherein said test circuit is further configured to present said rate signal to said sender in a ~~second~~ full rate condition in response to said number being less than said first threshold.

6. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a precedence.

7. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a priority.

8. (ORIGINAL) The circuit according to claim 1, wherein said probabilistic test is based upon a volume rate.

9. (ORIGINAL) The circuit according to claim 1, wherein said number is a time average of said data packets in said buffer.

10. (CURRENTLY AMENDED) The circuit according to claim 9, wherein said test circuit is further configured to (i) discard said additional data packet in response to said number being at least as great as a second threshold, (ii) ~~present an~~  
5 ~~identification signal identifying said additional data packet as~~  
~~discarded,~~ (iii) present a rate signal in a first condition in response to said number being greater than said first threshold, and (iv) (iii) present said rate signal in a second condition in response to said number being less than said first threshold.

11. (CURRENTLY AMENDED) A method for managing congestion of a plurality of data packets in a buffer, comprising the steps of:

(A) monitoring a number of said plurality of data  
5 packets in said buffer;

(B) receiving ~~permitting~~ an additional data packet to said plurality of data packets;

(C) storing said additional data packet into said buffer in response to said number being less than a first threshold; and

10 ~~(C)~~ (D) discarding said additional data packet in accordance with a probabilistic test without said additional data

packets reaching said buffer in response to said number being greater than said first threshold; and

(E) presenting an identification signal to a sender of said additional data packet identifying said additional data packet as discarded.

12. (ORIGINAL) The method according to claim 11, further comprising the step of:

discarding said additional data packet in response to said number being at least as great as a second threshold.

13. (CANCELED)

14. (CURRENTLY AMENDED) The method according to claim 11, further comprising the step of:

presenting a rate signal to said sender in a ~~first~~ slow rate condition in response to said number being greater than said first threshold.

15. (CURRENTLY AMENDED) The method according to claim 14, further comprising the step of:

presenting said rate signal to said sender in a ~~second~~ full rate condition in response to said number being less than said first threshold.

16. (CURRENTLY AMENDED) The method according to claim 11, further comprising the step of:

time averaging said number prior to step (C) ~~(B)~~.

17. (CURRENTLY AMENDED) A circuit comprising:

means for monitoring a number of ~~said~~ a plurality of data packets in ~~said~~ a buffer;

means for receiving ~~permitting~~ an additional data packet to said plurality of data packets;

means for storing said additional data packet into said buffer in response to said number being less than a first threshold; ~~and~~

means for discarding said additional data packet without storing said additional data packets in said buffer in accordance with a probabilistic test in response to said number being greater than said first threshold; and

means for presenting an identification signal identifying said additional data packet as discarded.

18. (NEW) The circuit according to claim 2, wherein said test circuit is further configured to present a rate signal to a sender of said additional data packets in a stop transmission

condition in response to said number being greater than said second  
5 threshold.

19. (NEW) The method according to claim 12, further  
comprising the step of:

presenting a rate signal to a sender of said additional  
data packets in a stop transmission condition in response to said  
5 number being greater than said second threshold.

20. (NEW) The circuit according to claim 9, wherein said  
number is determined before said additional data packet is  
permitted into said buffer.

21. (NEW) The circuit according to claim 1, further  
comprising a queuing management circuit disposed between said  
buffer and an output and configured to transfer said data from said  
buffer to said output.

22. (NEW) The circuit according to claim 17, further  
comprising means for managing presentation of said data packets  
from said buffer to an output.